

**PCT REQUEST**

S00P1449WO00

Original (for SUBMISSION)

<b>0</b>	<b>For receiving Office use only</b>	
<b>0-1</b>	International Application No.	
<b>0-2</b>	International Filing Date	
<b>0-3</b>	Name of receiving Office and "PCT International Application"	
<b>0-4</b>	<b>Form - PCT/RO/101 PCT Request</b>	
<b>0-4-1</b>	Prepared using	<b>PCT-EASY Version 2.91 (updated 10.10.2000)</b>
<b>0-5</b>	<b>Petition</b> The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
<b>0-6</b>	<b>Receiving Office (specified by the applicant)</b>	<b>Japanese Patent Office (RO/JP)</b>
<b>0-7</b>	<b>Applicant's or agent's file reference</b>	<b>S00P1449WO00</b>
<b>I</b>	<b>Title of Invention</b>	<b>RECORDING APPARATUS AND RECORDING METHOD</b>
<b>II</b>	<b>Applicant</b>	
<b>II-1</b>	This person is:	<b>applicant only</b>
<b>II-2</b>	Applicant for	<b>all designated States except US</b>
<b>II-4</b>	Name	<b>SONY CORPORATION</b>
<b>II-5</b>	Address:	<b>7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo 141-0001 Japan</b>
<b>II-6</b>	State of nationality	<b>JP</b>
<b>II-7</b>	State of residence	<b>JP</b>
<b>II-8</b>	Telephone No.	<b>03-5448-2111</b>
<b>II-9</b>	Facsimile No.	<b>03-5448-5709</b>
<b>III-1</b>	<b>Applicant and/or inventor</b>	
<b>III-1-1</b>	This person is:	<b>applicant and inventor</b>
<b>III-1-2</b>	Applicant for	<b>US only</b>
<b>III-1-4</b>	Name (LAST, First)	<b>TOGASHI, Haruo</b>
<b>III-1-5</b>	Address:	<b>C/O SONY CORPORATION 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo 141-0001 Japan</b>
<b>III-1-6</b>	State of nationality	<b>JP</b>
<b>III-1-7</b>	State of residence	<b>JP</b>

## PCT REQUEST

2/4

S00P1449WO00

Original (for SUBMISSION)

III-2	<b>Applicant and/or Inventor</b>	
III-2-1	This person is:	applicant and inventor
III-2-2	Applicant for	US only
III-2-4	Name (LAST, First)	SUGIYAMA, Akira
III-2-5	Address:	C/O SONY CORPORATION 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo 141-0001 Japan
III-2-6	State of nationality	JP
III-2-7	State of residence	JP
III-3	<b>Applicant and/or Inventor</b>	
III-3-1	This person is:	applicant and inventor
III-3-2	Applicant for	US only
III-3-4	Name (LAST, First)	TODO, Shin
III-3-5	Address:	C/O SONY CORPORATION 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo 141-0001 Japan
III-3-6	State of nationality	JP
III-3-7	State of residence	JP
III-4	<b>Applicant and/or Inventor</b>	
III-4-1	This person is:	applicant and inventor
III-4-2	Applicant for	US only
III-4-4	Name (LAST, First)	MATSUMOTO, Hideyuki
III-4-5	Address:	C/O SONY CORPORATION 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo 141-0001 Japan
III-4-6	State of nationality	JP
III-4-7	State of residence	JP
IV-1	<b>Agent or common representative; or address for correspondence</b>	
	The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	Agent
IV-1-1	Name (LAST, First)	SUGIURA, Masatomo
IV-1-2	Address:	7th Floor, Ikebukuro Park Bldg., 49-7, Minami Ikebukuro 2-chome, Toshima-ku, Tokyo 171-0022 Japan
IV-1-3	Telephone No.	03-3980-0339
IV-1-4	Facsimile No.	03-3982-3166
IV-1-5	e-mail	sugipat2@mbc.nifty.com
V	<b>Designation of States</b>	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	EP: AT BE CH&LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE and any other State which is a Contracting State of the European Patent Convention and of the PCT

## PCT REQUEST

S00P1449WO00

Original (for SUBMISSION)

<b>V-2</b>	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<b>JP KR US</b>	
<b>V-5</b>	<b>Precautionary Designation Statement</b> In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.		
<b>V-6</b>	<b>Exclusion(s) from precautionary designations</b>	<b>NONE</b>	
<b>VI-1</b>	<b>Priority claim of earlier national application</b>		
VI-1-1	Filing date	<b>02 December 1999 (02.12.1999)</b>	
VI-1-2	Number	<b>Patent Application 11-343375</b>	
VI-1-3	Country	<b>JP</b>	
<b>VII-1</b>	<b>International Searching Authority Chosen</b>	<b>Japanese Patent Office (JPO) (ISA/JP)</b>	
<b>VIII</b>	<b>Check list</b>	number of sheets	electronic file(s) attached
VIII-1	Request	<b>5</b>	-
VIII-2	Description	<b>45</b>	-
VIII-3	Claims	<b>3</b>	-
VIII-4	Abstract	<b>1</b>	<b>s00p1449_abstract.txt</b>
VIII-5	Drawings	<b>20</b>	-
VIII-7	<b>TOTAL</b>	<b>74</b>	
	<b>Accompanying items</b>	paper document(s) attached	electronic file(s) attached
VIII-8	Fee calculation sheet	✓	-
VIII-9	Separate signed power of attorney	✓	-
VIII-12	Priority document(s)	<b>Item(s) VI-1</b>	-
VIII-16	PCT-EASY diskette	-	<b>Diskette</b>
VIII-17	Other (specified):	<b>Revenue stamps of transmittal fee and search fee for receiving office</b>	-
VIII-17	Other (specified):	<b>Submission of certificate of payment for international fee</b>	-
<b>VIII-18</b>	<b>Figure of the drawings which should accompany the abstract</b>	<b>23</b>	

**PCT REQUEST**

S00P1449WO00

Original (for SUBMISSION)

VIII-19	Language of filing of the international application	<b>Japanese</b>
IX-1	Signature of applicant or agent	
IX-1-1	Name (LAST, First)	<b>SUGIURA, Masatomo</b>

**FOR RECEIVING OFFICE USE ONLY**

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	<b>ISA/JP</b>
10-6	Transmittal of search copy delayed until search fee is paid	

**FOR INTERNATIONAL BUREAU USE ONLY**

11-1	Date of receipt of the record copy by the International Bureau	
------	--	--

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/08509

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> H04N5/92, H04N7/26

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> H04N5/91-5/956, H04N7/26

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2001  
Kokai Jitsuyo Shinan Koho 1971-2001 Jitsuyo Shinan Toroku Koho 1996-2001

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP, 5-199495, A (Hitachi, Ltd.), 06 August, 1993 (06.08.93), Par. Nos. [0008]-[0016]; Fig. 1 (Family: none)	1-10
A	JP, 8-279987, A (Sharp Corporation), 22 October, 1996 (22.10.96), Par. Nos. [0012]-[0014]; Figs. 1 to 2 & EP, 695088, A & JP, 8-46902, A & JP, 8-279979, A & EP, 982942, A	1-10
A	JP, 7-250331, A (Matsushita Electric Ind. Co., Ltd.), 26 September, 1995 (26.09.95), Par. Nos. [0022]-[0026]; Figs. 3 to 4 & US, 5701386, A	1-10

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:  
"A" document defining the general state of the art which is not considered to be of particular relevance  
"E" earlier document but published on or after the international filing date  
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
"O" document referring to an oral disclosure, use, exhibition or other means  
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international search  
16 February, 2001 (16.02.01)

Date of mailing of the international search report  
27 February, 2001 (27.02.01)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

## 国際調査報告

(法8条、法施行規則第40、41条)  
[PCT18条、PCT規則43、44]

出願人又は代理人 の書類記号 S00P1449W000	今後の手続きについては、国際調査報告の送付通知様式(PCT/ISA/220) 及び下記5を参照すること。	
国際出願番号 PCT/JPO0/08509	国際出願日 (日.月.年) 01.12.00	優先日 (日.月.年) 02.12.99
出願人(氏名又は名称) ソニー株式会社		

国際調査機関が作成したこの国際調査報告を法施行規則第41条(PCT18条)の規定に従い出願人に送付する。  
この写しは国際事務局にも送付される。

この国際調査報告は、全部で 3 ページである。

☐ この調査報告に引用された先行技術文献の写しも添付されている。

## 1. 国際調査報告の基礎

a. 言語は、下記に示す場合を除くほか、この国際出願がされたものに基づき国際調査を行った。

☐ この国際調査機関に提出された国際出願の翻訳文に基づき国際調査を行った。

b. この国際出願は、ヌクレオチド又はアミノ酸配列を含んでおり、次の配列表に基づき国際調査を行った。

☐ この国際出願に含まれる書面による配列表

☐ この国際出願と共に提出されたフレキシブルディスクによる配列表

☐ 出願後に、この国際調査機関に提出された書面による配列表

☐ 出願後に、この国際調査機関に提出されたフレキシブルディスクによる配列表

☐ 出願後に提出した書面による配列表が出願時における国際出願の開示の範囲を超える事項を含まない旨の陳述書の提出があった。

☐ 書面による配列表に記載した配列とフレキシブルディスクによる配列表に記録した配列が同一である旨の陳述書の提出があった。

2. ☐ 請求の範囲の一部の調査ができない(第I欄参照)。

3. ☐ 発明の単一性が欠如している(第II欄参照)。

4. 発明の名称は

☒ 出願人が提出したものを承認する。

☐ 次に示すように国際調査機関が作成した。

5. 要約は

☒ 出願人が提出したものを承認する。

☐ 第III欄に示されているように、法施行規則第47条(PCT規則38.2(b))の規定により国際調査機関が作成した。出願人は、この国際調査報告の発送の日から1カ月以内にこの国際調査機関に意見を提出することができる。

6. 要約書とともに公表される図は、

第 23 図とする。☒ 出願人が示したとおりである。

☐ なし

☐ 出願人は図を示さなかった。

☐ 本図は発明の特徴を一層よく表している。

## A. 発明の属する分野の分類 (国際特許分類 (IPC))

Int. Cl<sup>7</sup> H04N5/92, H04N7/26

## B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (IPC))

Int. Cl<sup>7</sup> H04N5/91-5/956, H04N7/26

最小限資料以外の資料で調査を行った分野に含まれるもの

日本国実用新案公報 1922-1996年  
 日本国公開実用新案公報 1971-2001年  
 日本国登録実用新案公報 1994-2001年  
 日本国実用新案登録公報 1996-2001年

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

## C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
A	JP, 5-199495, A (株式会社日立製作所) 6. 8月. 1993 (06. 08. 93) 段落番号【0008】-【0016】, 第1図 (ファミリーなし)	1-10
A	JP, 8-279987, A (シャープ株式会社) 22. 10月. 1996 (22. 10. 96) 段落番号【0012】-【0014】, 第1図-第2図 & EP, 695088, A & JP, 8-46902, A & JP, 8-279979, A & EP, 982942, A	1-10

☒ C欄の続きにも文献が列举されている。☐ パテントファミリーに関する別紙を参照。

## \* 引用文献のカテゴリー

「A」 特に関連のある文献ではなく、一般的技術水準を示すもの  
 「E」 国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの  
 「L」 優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)  
 「O」 口頭による開示、使用、展示等に言及する文献  
 「P」 国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

「T」 国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの  
 「X」 特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの  
 「Y」 特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの  
 「&」 同一パテントファミリー文献

国際調査を完了した日

16. 02. 01

国際調査報告の発送日

27.02.01

国際調査機関の名称及びあて先

日本国特許庁 (ISA/JP)  
 郵便番号100-8915  
 東京都千代田区霞が関三丁目4番3号

特許庁審査官 (権限のある職員)  
 松元 伸次

5C

2949

電話番号 03-3581-1101 内線 3540

C (続き). 関連すると認められる文献		
引用文献の カテゴリ*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
A	JP, 7-250331, A (松下電器産業株式会社) 26. 9月. 1995 (26. 09. 95) 段落番号【0022】-【0026】, 第3図-第4図 & US, 5701386, A	1-10

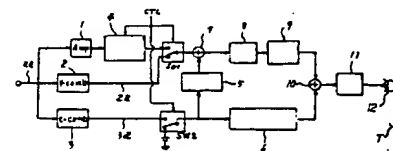


**(54) MAGNETIC RECORDING AND/OR REPRODUCING DEVICE FOR VIDEO SIGNAL**

- (11) 5-199493 (A) (43) 6.8.1993 (19) JP  
 (21) Appl. No. 4-30145 (22) 21.1.1992  
 (71) VICTOR CO OF JAPAN LTD (72) YUTAKA ICHII  
 (51) Int. Cl.<sup>5</sup> H04N5/91, H04N7/00, H04N7/08, H04N9/80, H04N9/83

**PURPOSE:** To provide a magnetic recording and/or reproducing device for video signals which can obtain the wide images of high quality.

**CONSTITUTION:** An FM modulating circuit 9 is provided to apply the FM modulation to a luminance signal 2a separated and outputted from a 2nd comb filter 2 and an auxiliary signal dd, and a recording chroma signal system 6 which applies the low band conversion to a chroma signal 3a separated and outputted from a 1st comb filter 3. Then the output signals of the circuit 9 and the system 6 are recorded after the multiplication of frequency.



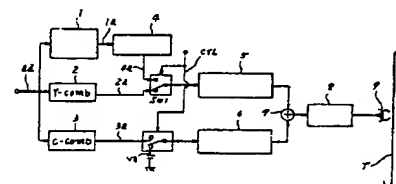
4: set amplifier reinforcing circuit, 5: burst gate circuit,  
 6: recording chroma signal system, 8: emphasizing circuit,  
 11: recording amplifier

**(54) MAGNETIC RECORDING DEVICE FOR VIDEO SIGNAL**

- (11) 5-199494 (A) (43) 6.8.1993 (19) JP  
 (21) Appl. No. 4-30146 (22) 21.1.1992  
 (71) VICTOR CO OF JAPAN LTD (72) YUTAKA ICHII  
 (51) Int. Cl.<sup>5</sup> H04N5/91, H04N7/00, H04N7/08, H04N9/80, H04N9/83

**PURPOSE:** To prevent the deterioration of the auxiliary signal and to record the wide video signals of high quality by providing a demodulating circuit for the auxiliary signal related to a pattern signal and a recording luminance signal system which applies the FM modulation to the output signal of the demodulating circuit and the luminance signal.

**CONSTITUTION:** The EDTV signal aa is supplied to a demodulating circuit 1 as well as to a 1st comb filter 2 (Y-COMB) and a 2nd filter 3 (C-COMB) which separate and output the luminance signal 2a and the chroma signal 3a from the signal aa respectively via a transmission line which is not shown in a diagram. The signal 3a is supplied to one of both inputs of a 2nd switch circuit SW2 to which a prescribed potential V0 is supplied through the other input. The signal obtained by selectively outputting the signal 3a is supplied to a recording chroma signal system 6 in a period when a control signal is kept at a low level. A recording luminance signal system 5 supplies the signal obtained with application of the recording luminance signal processing like the FM modulation, etc., to one of both inputs of a 1st adder circuit 7. The system 6 supplies the signal obtained with application of the known recording chroma signal processing like the low band conversion, etc., to the other input of the circuit 7. Then both inputs undergo the frequency division multiplication through the circuit 7 and are supplied to a recording amplifier and then to a magnetic tape T.



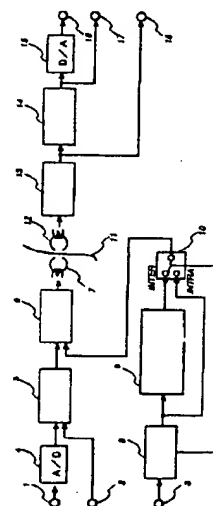
4: scramble circuit

**(54) DIGITAL VIDEO RECORDING DEVICE**

- (11) 5-199495 (A) (43) 6.8.1993 (19) JP  
 (21) Appl. No. 4-10092 (22) 23.1.1992  
 (71) HITACHI LTD (72) YUKIO FUJII(3)  
 (51) Int. Cl.<sup>5</sup> H04N5/92, H04N7/133

**PURPOSE:** To reduce the transmission of errors in a shuttle reproduction state by decoding once a part or all of the input digital video signals that undergone the inter-motion compensating frame estimated compression coding and then coding those video signals.

**CONSTITUTION:** The analog video signals inputted through an input terminal 1 are converted into the digital signals by an A/D converter 4 and sent to an intra-frame compression coding circuit 5. Meanwhile the digital video signals inputted through an input terminal 2 are directly sent to the circuit 5. The image data compressed and coded by the circuit 5 are supplied to a VTR transmission coding circuit 6. In regard of the compressed image signal inputted through an input terminal 5 and including the inter-frame signal estimation signal, the header information added to the image data is read by a header detecting circuit 8. Then the intra-frame estimation signal is decoded and coded again by a code converter 9 for the image data after detection of a header. Then the image data are sent to the circuit 6 via a switch 10 and processed there. These processed data are recorded on a magnetic tape 11 via a magnetic head 7.



13: VTR transmission decoding circuit, 14: intra-frame/inter-frame decoding circuit